3.14 PUBLIC SERVICES AND UTILITIES

This section summarizes the public services and utilities in the project study area, including San Elijo Lagoon and proposed materials placement sites identified for potential materials disposal/reuse. Public utilities and infrastructure can include wastewater and sewer outfalls/access/structures, solid waste disposal sites, natural gas lines, electrical transmission lines, and utility poles. Public services that could be potentially impacted by the project include lifeguard operations at local beaches. This restoration project does not increase the demand for public services or utilities, so this analysis focuses on the potential for disruption of service and infrastructure. Information for this section was compiled, summarized, and incorporated from project field surveys and service provider information as referenced in the text.

3.14.1 AFFECTED ENVIRONMENT

A variety of utility infrastructure traverses the project study area. Multiple service providers, jurisdictions, and agencies own and maintain these utilities, such as the cities of Encinitas and Solana Beach and San Diego Gas & Electric (SDG&E). This existing utility infrastructure is described below.

The public service at issue is lifeguard service and associated facilities, such as lifeguard towers, at the local beaches proposed for materials placement. Other public services, such as libraries, schools, and other similar services would not be affected by the proposed project and are not discussed further.

San Elijo Lagoon Study Area

Sewer

The San Elijo Water Reclamation Facility (SEWRF) is located just north of the project study area near the central basin and west of I-5. The SEWRF is a publicly owned wastewater treatment plant and water recycling facility that handles mostly domestic waste and is permitted to discharge up to 2.48 million gallons per day of tertiary treated wastewater, and up to 5.25 million gallons per day of secondary treated wastewater to the Pacific Ocean through the San Elijo Ocean Outfall. The San Elijo Ocean Outfall is a 30- to 48-inch-diameter reinforced concrete pipe, which extends from the SEWRF to 1.5 miles offshore for the purpose of discharging treated wastewater (SEJPA 2013). The San Elijo Ocean Outfall passes through the northern corner of the central and west basins of San Elijo Lagoon from Manchester Avenue and exits to the ocean just south of the mouth of the lagoon.

Various other sewer lines are located within the project study area. A 12-inch-diameter Solana Beach force main sewer line runs north-south between the SEWRF toward an abandoned treatment plant and the existing Solana Beach Pump Station. The sewer main is buried at a depth of approximately 45 feet below the lagoon surface. The Solana Beach Pump Station is located within the southern portion of the project study area where the west and central basins meet. Sewer lines and associated manholes are located along the northern border of the project study area in Manchester Avenue. Sewer manholes are also concentrated along the north side of the western border of the west basin and along the I-5 ROW. Additionally, a sewer line (and associated manholes) bisects the northern corner of the east basin. Sewer infrastructure is also associated with the north end of the Coast Highway 101 bridge and ROW within the project study area. The former sewage pond in the central basin is no longer owned or operated by a service provider.

Water

Water mains are located north of the project area, generally along Manchester Avenue and its associated ROW. Water mains are also located along the northern portion of the Coast Highway 101 bridge within the project study area. No other substantial water infrastructure is located within the lagoon basins.

Electricity

SDG&E provides electrical service to the San Diego region, including the project study area. Electrical transmission corridors traverse San Elijo Lagoon in the central and east basins. In the central basin, a 69-kilovolt (kV) overhead electrical line runs parallel to the railroad ROW, passing north and south throughout the length of the lagoon. Another 69-kV overhead electrical line traverses the lagoon in the east basin, forming an L-shape configuration south of Manchester Avenue. This line connects with another transmission corridor in the far eastern portion of the basin.

Natural Gas

SDG&E is the natural gas service provider for most of the San Diego region, including the project study area. Two underground gas lines run through the project study area; one in the central basin and the other in the northeast corner of the east basin. A 12-inch-diameter natural gas line travels north-south through the central basin, immediately east of the railroad tracks. Valves associated with this line are located immediately outside of the project study area to both the north and south. Another natural gas line traverses north/south near the very eastern

boundary of the project study area in the east basin. No restoration activities are anticipated to take place near the gas line in the east basin so this gas line is not discussed further.

Solid Waste

In the areas surrounding the project study area, the City of Encinitas has an exclusive franchise agreement with EDCO Waste and Recycling Services to provide solid waste collection services for both residential and commercial customers. The City of Solana Beach contracts solid waste services to two companies, Coast Waste Management Inc. and EDCO Waste and Recycling Inc., which provide service to residential and commercial accounts, respectively (Solana Beach 2013). There are no active or closed solid waste disposal sites within the project study area.

Lifeguard Services

Lifeguard services are not provided within the Reserve area as swimming, wading, diving, fishing, watercraft, and other water-based recreation are not permitted within lagoon waters. The new inlet would pass through Cardiff Beach where lifeguard services are provided. State Lifeguard Tower No. 6 is located south of the existing San Elijo lagoon mouth and is pulled into the adjacent parking lot during the winter season. Lifeguard Tower No. 5 is located farther to the north with a viewing platform of approximately 15 feet high and is not moved seasonally.

Materials Disposal/Reuse Study Area

Public utility infrastructure is not typically located within the onshore sandy or rocky beach areas as the location is too volatile. The public structures associated with the materials placement beach locations are lifeguard towers. The offshore and nearshore materials placement locations are located on the ocean floor where public utilities or structures do not exist, with the exception of an ocean outfall. Each materials disposal/reuse site is briefly described below. The information presented below is referenced from the 2012 RBSP EIR/EA.

Cardiff

The 30-inch-diameter San Elijo Ocean Outfall is buried just south of the mouth of San Elijo Lagoon. The outfall is buried within the middle portion of the proposed onshore Cardiff materials placement site.

Immediately north of the materials placement site is commercial development known as Restaurant Row, which is located next to the beach, and a lifeguard access ramp that extends to the beach. State Lifeguard Tower No. 6, which is located south of the existing San Elijo lagoon

mouth, is pulled into the adjacent parking lot during the winter season. Lifeguard Tower No. 5 is located south of the development at the north end of the placement site. This tower is not moved seasonally, and its viewing platform is approximately 15 feet high.

Leucadia

The main access point to Leucadia, which is also known as Beacon's Beach, is located at the end of Leucadia Boulevard. A lifeguard tower is placed at Beacon's Beach every summer. The bluffs behind Beacon's Beach are known to be unstable with potential for landslides without seawalls providing protection. Numerous seawalls have been built between Grandview and Beacon's (permitted and unpermitted).

Moonlight Beach

One 36-inch-diameter, one 60-inch-diameter, and three 48-inch-diameter storm drain pipes are located at the end of B Street at Moonlight Beach. The City of Encinitas has excavated several feet around the outlets to expose the pipes and allow proper drainage flow.

A permanent lifeguard stand is located at the south end of Moonlight Beach at C Street and a temporary tower is placed at the north end of the beach at B Street. Both are situated on the berm above the low tide beach, and neither tower is moved during the winter season. Multiple concrete and wooden staircases provide public access from the top of the bluff to the beach.

Solana Beach

A 60-inch-diameter energy dissipater storm drainpipe is located at the west end of Plaza Street immediately adjacent to the Fletcher Cove access ramp. Another substantially smaller storm drain outlet is located at Seascape Surf, south of Fletcher Cove. This storm drain emerges from the bluff face at approximately 9 to 10 feet above msl. None of the drain pipes are directly on the beach.

Four temporary lifeguard towers are located near this materials placement site: one at Fletcher Cove, a Junior Lifeguard tower at 350 S. Sierra Avenue, one at the base of the Seascape Surf access point, and one at 825 S. Sierra Avenue. All of the towers are annually placed on the beach the weekend before Memorial Day and removed the weekend after Labor Day. In the City of Solana Beach, there are eight vertical access points (four public, four private) that provide access to the beach below (City of Solana Beach 2011).

Torrey Pines

Three permanent lifeguard towers are on the Torrey Pines material placement site. State Lifeguard Tower No. 1 is the southernmost tower, located about 100 yards south of the beach access road. Towers No. 2 and No. 3 are located farther north. Riprap has been placed on the beach to protect the road. No additional structures or utilities currently exist within the shoreline area of the proposed materials placement site.

SO-5/SO-6

Sites SO-5 and SO-6 are located offshore. SO-5 does not contain public utilities or structures within its boundaries. The San Elijo Ocean Outfall passes east-west south of SO-6 at a depth of -47.9 feet mean lower low water (MLLW).

LA-5

Ocean disposal site LA-5 is located many miles offshore and does not contain public utilities or structures within its boundaries.

3.14.2 CEQA Thresholds of Significance

A significant impact related to public services and utilities would occur if implementation of the proposed project would:

A. Result in the need for new systems or substantial alterations to existing systems due to exceedance of available capacity or an incompatibility with the project design the construction of which could cause significant environmental effects.

The CEQA threshold of significance for public services and utilities was derived from a combination of thresholds listed in Appendix G of the CEQA Guidelines and thresholds used in the 2012 RBSP EA/EIR (SCH #2020051063).

3.14.3 Environmental Consequences

This section discusses the environmental consequences, or impacts, associated with the proposed project on public services and utilities within the study area. Potential adverse, significant, or beneficial direct and indirect impacts are identified as appropriate.

Because the proposed project would generate minimal temporary increased demand for services or utilities (mostly associated with the electric dredge, if used), this analysis focuses on displacement or disruption of public utility infrastructure and public services. Various public utilities and structures traverse the lagoon and could be affected by implementation of the proposed project. Prior to final project design and engineering, a detailed utilities study would be done in coordination with utility providers to accurately locate utilities for avoidance purposes (PDF-23). The utility study would provide information for use in design and engineering to minimize impacts to utilities and service disruptions and provide for the continued stability and integrity of existing or relocated utilities and infrastructure.

Lagoon Restoration

Alternative 2A–Proposed Project

Restoration activities within the lagoon would require the dredging, removal, and backfill of large quantities of material, approximately 1.4 mcy from the lagoon basins and tidal channels. Most utilities in the project area are generally situated in or near road ROWs, in well-defined easements, or deeply buried. For example, the recently installed Solana Beach sewer pipe (-45 feet) traverses the central basin and west basin and is located underneath the proposed sedimentation basin/overdredge pit. As such, activities occurring near this pipeline would not exceed -40 feet to ensure adequate cover is maintained (PDF-25). However, there are areas within the lagoon where restoration activities associated with Alternative 2A may disturb existing utilities. In the central basin, a 69-kV overhead electric transmission line runs parallel to the railroad. One pole along this line is situated in the middle of the proposed new inlet location. There would be no way to avoid this pole under Alternative 2A and it would need to be relocated to construct this alternative. Access to the poles north of the inlet along this line would also be hindered. In addition, restoration activities in the east basin also have the potential to disturb one power pole located along the L-shaped transmission line in the northeastern portion of the east basin. This pole is currently located in dense vegetation that would be disturbed as part of the restoration plan. It may be possible to avoid this pole as part of the project's final design, or this pole may need to be relocated. The process for relocating and/or avoiding utilities infrastructure would occur with full coordination and cooperation with SDG&E to minimize service disruption (PDF-23 and PDF-24) and meet siting requirements. The formal utilities investigation would be conducted as part of the next phase of the project, and infrastructure within the lagoon would be fully integrated into the final design and ensure ongoing structural integrity of the infrastructure. Potential utility relocation is expected to be within the identified disturbance area of the project with the possible exception of the SDG&E utility pole as described above. If the subsequent utility study indicates the SDG&E pole would need to be relocated outside of the disturbance footprint, the pole relocation would be designed to avoid significant environmental impacts at

that time and in accordance with applicable SDG&E siting policies. The proposed temporary flooding to facilitate construction activities would not interfere with or impact public utilities or infrastructure as no aboveground infrastructure would be within flooding limits and those flooding limits are below historic flooding levels.

Under Alternative 2A, changes would also be necessary to Coast Highway 101 and a bridge would be constructed over the new inlet. Activities associated with bridge construction would be typical of general construction projects. Alterations to public utility infrastructure associated with the Coast Highway 101 bridge construction would be avoided to the greatest extent possible; if necessary, utility replacement would generally be an in-kind replacement or reinstallation. Construction activities could require a nominal amount of water or wastewater disposal, but not of the magnitude that would affect the service providers' ability to supply adequate service or exceed the capacity of existing facilities, especially given the temporary nature of the demand. Construction debris would be generated during Coast Highway 101 roadway removal and bridge construction. This material would be recycled/reused as appropriate or require disposal. The construction contractor would work with local landfill facilities to locate the most appropriate location for materials disposal. The closest landfill to the project site is the West Miramar landfill located in the City of San Diego, which has adequate capacity until the year 2022 (City of San Diego 2013). Additionally, some vegetation spoils and CDFW dike material would likely need to be hauled off-site for disposal at a local landfill. This volume of material would not be of the magnitude to substantially affect landfill capacity and would be coordinated by the contractor. Other than the construction of the new bridge for Alternative 2A, minor adjustments in existing service infrastructure in the dredging areas are incorporated as part of the project with project design features required to minimize and avoid utility disruption (PDFs-23 through 25). For these reasons, **implementation of the SELRP would not require the need for new systems or substantial alterations to existing systems due to exceedance of available capacity or an incompatibility with the project design and no substantial adverse direct or indirect effects would result. Impacts would be less than significant (Criterion A).**

If electrical dredging is used, facilities for electrical power would be provided in the form of a small temporary on-site electrical power substation. If necessary, the temporary electrical power site would be located north of the proposed nesting area and next to staging area #5 (see Figure 2-15). The electrical power substation would connect into existing poles and transmission lines adjacent to railroad tracks and would not require permanent new transmission infrastructure. The power substation would contain outlets for electrical dredge equipment hook-up. A temporary pole may be necessary between the existing transmission lines to feed the power site. Electrical substation equipment would be contained within an enclosed metal structure, approximately 10 feet by 10 feet wide and 8 feet high. The small enclosure could be painted or fenced. The electrical equipment and enclosure would be removed at completion of construction. The

impacts from construction of the enclosure would be minor, but have been analyzed in other portions of this document as appropriate (such as Section 3.9, Visual Resources).

The power demand from use of electrical dredge equipment from local electrical sources would not be sufficient to impact the provision of electrical service in the area. The demand would occur during dredging activities (periodically between fall 2015 and summer 2016) and would not require new or additional electrical delivery infrastructure beyond that proposed as part of the project. Long-term maintenance and adaptive management would also include maintenance dredging of the inlet, subtidal/sedimentation basin, and channels. The nature of these construction activities would not require substantial use of public utilities, such as natural gas, sewer, water, etc. Restoration activities would not result in the development of the types of facilities that would require the use of, connection to, or increased demand on public utilities creating the need for new systems, supply, or infrastructure that could result in environmental effects. There would be no need for substantial alterations to infrastructure, service would not be required from a facility that has insufficient capacity, nor would the project cause an exceedance of available capacity. **No substantial adverse direct or indirect effects would result and impacts would be less than significant (Criterion A).**

Alternative 1B

As with Alternative 2A, restoration activities within the lagoon for Alternative 1B would require the dredging, removal, and backfill of large quantities of material, approximately 1.2 mcy from the lagoon basins and tidal channels. The nature of these construction activities would not require substantial use of public utilities and would not result in the development of the types of facilities that could result in the need for new systems, supply, or infrastructure. The electrical power substation, as described in Alternative 2A, would also be necessary for Alternative 1B, and would be removed after electrical dredging operations were complete. Additionally, because the location of utility infrastructure in the project study area would be fully determined through a utilities study prior to final design and engineering, the dredging and materials removal processes would be designed and completed to avoid or relocate existing utilities as needed. No modification of utilities in or adjacent to Coast Highway 101 would be needed because a new bridge/inlet would not be constructed. For these reasons, Alternative 1B would not result in the temporary or permanent need for new utility systems, substantial alterations to public service systems that could result in environmental effects, or exceedance of available capacity. **No substantial adverse direct or indirect effects would result and impacts would be less than significant (Criterion A).**

Small amounts of construction debris could be generated during some lagoon restoration activities, such as vegetation spoils and material from the CDFW dike. Similar to Alternative 2A,

the construction contractor would work with County landfill facilities to identify the most appropriate location for materials disposal. Thus, Alternative 1B would not result in service requirements from a facility that has insufficient capacity or cause a temporary or permanent exceedance of available capacity. **No substantial adverse direct or indirect effects would result and impacts would be less than significant (Criterion A).**

Alternative 1A

Restoration activities within the lagoon for Alternative 1A would require the dredging and removal of material, approximately 160,000 cy from the lagoon basins and tidal channels. Similar to Alternative 2A, the nature of these construction activities would not require substantial use of public utilities and would not result in the development of the types of facilities that could result in the need for new systems, supply, or infrastructure. The electrical power site, as described in Alternative 2A, would also be necessary for Alternative 1A and would be removed after electrical dredging operations were completed. Additionally, because the location of utility infrastructure in the project study area would be fully determined through a utilities study prior to final design and engineering, the dredging and materials removal processes would be designed and completed to avoid existing utilities and would involve coordination with local utility companies. For these reasons, Alternative 1A would not result in the temporary or permanent need for new utility systems or substantial alterations to public service systems that could result in environmental effects. **No substantial adverse direct or indirect effects would result and impacts would be less than significant (Criterion A).**

Small amounts of construction debris could be generated during some activities, such as vegetation spoils and material from the CDFW dike. The construction contractor would work with landfill operators to identify the most appropriate location for materials disposal.

No Project/No Federal Action Alternative

No dredging or excavation would occur under the No Project/No Federal Action Alternative. As stated in Chapter 2, it can be assumed that there would be a continuation of the current mechanical excavation, which occurs when funding allows, maintaining an open lagoon inlet. The No Project/No Federal Action Alternative involves no new development that could result in the need for increased or altered public utility systems. No construction debris would be generated. Thus, there would be no temporary or permanent impacts to utilities or public services or need for new systems, substantial alterations to public service systems that could result in environmental effects, or exceedance of available capacity. **No substantial adverse impacts would result and impacts would be less than significant (Criterion A).**

Materials Disposal/Reuse

As noted in Section 3.14.1, Affected Environment, the materials disposal/reuse sites are located offshore, nearshore, or onshore where the public services/utilities of concern are the buried ocean outfall (near SO-6) and lifeguard towers/public stairs/drains at various onshore sites. If placement in the nearshore off Cardiff occurs, the project would place more cover on the outfall. This placement would not affect the need for new systems or substantial alterations to existing systems due to exceedance of available capacity or an incompatibility with the project design, and it would be a benefit. Therefore, this issue is not discussed further. Thus, the focus of this analysis is the potential impact to existing facilities at various onshore sites, which applies to Alternative 2A and Alternative 1B; Alternative 1A is not discussed further.

The onshore beach placement of material, as proposed under Alternative 2A and Alternative 1B, would be similar to sand placement and beach building strategies utilized for the 2012 RBSP. Thus, much of the information and analysis presented in the 2012 RBSP EIR/EA (SANDAG 2011) are incorporated into the discussion and analysis of onshore beach materials placement for the proposed project.

Alternative 2A–Proposed Project

Materials placement on the surface of proposed onshore beach locations would be completed via a pipeline from a barge or directly from the lagoon. Where lifeguard towers or access stairways are located, the sand placement would not impede the ability to use or access these facilities. As shown most recently by the 2012 RBSP, sand cover generally provides additional temporary stabilization and protection for structures from storm surges or erosion. Sight lines from the viewing platforms of the lifeguard towers would be maintained, and there would be no interference with views for the lifeguards (PDF-55). Drainage sand placement around storm drain outlets would be placed to allow continuation of proper drainage (PDF-44).

With the above project design features, the transport and placement of material to onshore locations would not result in the need for new systems or substantial alterations to existing systems due to exceedance of available capacity or an incompatibility with the project design. Thus, **public service and utilities impact would be less than significant and would not result in substantial direct or indirect adverse effects (Criterion A).**

Alternative 1B

As described for Alternative 2A, materials placement on proposed onshore beach locations would be completed via a pipeline and would occur on the surface of the sites. Where lifeguard

towers or access stairways are located, the sand placement would not impede the ability to use or access these facilities and would typically provide additional temporary stabilization and protection with no interference to lifeguard line-of-sight views. Drainage sand placement around storm drain outlets would be designed to allow proper drainage. **Alternative 1B would not cause substantial direct or indirect adverse effects and a less than significant impact to public services and utilities would result (Criterion A).**

No Project/No Federal Action Alternative

No materials disposal or reuse would occur; thus, onshore placement sites would not have the temporary benefit of additional temporary stabilization and protection for the structures from storm surges or erosion. **No substantial adverse impacts would result and impacts would be less than significant (Criterion A).**

3.14.4 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

No significant or substantial adverse impacts to public utilities or structures are anticipated due to lagoon restoration or materials disposal/reuse as substantial use of public utilities or services would not be required and infrastructure would be relocated or avoided. Project design features incorporating a detailed utilities study and coordination with existing utility providers avoid and/or minimize impacts to utilities. Additional features incorporated into the project would minimize impacts to services by maintaining sight lines from lifeguard towers and appropriate drainage at storm drain outlets during materials placement. No mitigation measures are required.

3.14.5 LEVEL OF IMPACT AFTER MITIGATION

CEQA: No significant impacts to public utilities or structures were identified and mitigation measures are not required. Impacts would be less than significant.

NEPA: No substantial direct or indirect adverse impacts to public utilities or structures were identified.

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